

APPENDIX E

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (“RFA”),¹ the Commission has prepared this present Initial Regulatory Flexibility Analysis (“IRFA”) of the possible significant economic impact on a substantial number of small entities that might result from adoption of the rules proposed in the Further Notice of Proposed Rulemaking (“*Further Notice*”). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the applicable deadlines for initial comments, or reply comments, as specified in the *Further Notice*. The Commission will send a copy of the *Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (“SBA”).² In addition, the *Further Notice* and this IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

2. The accompanying *Report and Order* implements Congress’ mandate that people with disabilities have access to advanced communications services (“ACS”) and ACS equipment. Specifically, the rules adopted in the *Report and Order* implement Sections 716 and 717 of the Communications Act of 1934, as amended, which were added by the “Twenty-First Century Communications and Video Accessibility Act of 2010” (“CVAA”).⁴

3. The accompanying *Report and Order* implements the requirements of Section 716 of the Act, which requires providers of ACS and manufacturers of equipment used for ACS to make their products accessible to people with disabilities, unless accessibility is not achievable.⁵ The Commission also adopts rules to implement Section 717 of the Act, which requires the Commission to establish new recordkeeping and enforcement procedures for manufacturers and providers subject to Sections 255, 716, and 718.⁶

4. The accompanying *Report and Order* finds the record insufficient to adopt a permanent exemption or to adopt the criteria to be used to determine which small entities to exempt. The *Report and Order* therefore temporarily exempts all manufacturers of ACS equipment and all providers of ACS from the obligations of Section 716 if they qualify as small business concerns under the SBA rules and size standards for the industry in which they are primarily engaged. The *Report and Order* indicated that such an exemption was necessary to avoid the possibility of unreasonably burdening “small and entrepreneurial innovators and the significant value that they add to the economy.” This self-executing exemption would be applied until the development of a record to determine whether small entities should be permanently exempted and, if so, what criteria should be used to define small entities.⁷

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ *Id.*

⁴ Pub. L. No. 111-260, § 104.

⁵ See 47 U.S.C. § 617.

⁶ See 47 U.S.C. § 618.

⁷ See 13 C.F.R. § 121.201.

5. The *Report and Order* indicated that SBA has established maximum size standards used to determine whether a business concern qualifies as a small business concern in its primary industry.⁸ The SBA has generally adopted size standards based on the maximum number of employees or maximum annual receipts of a business concern.⁹ The SBA categorizes industries for its size standards using the North American Industry Classification System (“NAICS”), a “system for classifying establishments by type of economic activity.”¹⁰ The *Report and Order* identified some NAICS codes for possible primary industry classifications of ACS equipment manufacturers and ACS providers and the relevant SBA size standards associated with the codes.¹¹

	NAICS Classification ¹²	NAICS Code	SBA Size Standard ¹³
Services ¹⁴	Wired Telecommunications Carriers	517110	1,500 or fewer employees
	Wireless Telecommunications Carriers (except satellites)	517210	1,500 or fewer employees
	Telecommunications Resellers	517911	1,500 or fewer employees
	All Other Telecommunications	517919	\$25 million or less in annual receipts
	Software Publishers	511210	\$25 million or less in annual receipts
	Internet Publishing and Broadcasting and Web Search Portals	519130	500 or fewer employees
	Data Processing, Hosting, and Related Services	518210	\$25 million or less in annual receipts

⁸ See 13 C.F.R. § 121.201.

⁹ 13 C.F.R. § 121.106 (describing how number of employees is calculated); 13 C.F.R. § 121.104 (describing how annual receipts is calculated).

¹⁰ North American Industry Classification System; Revision for 2012, 76 Fed. Reg. 51240 (Aug. 17, 2011) (“*NAICS Final Decision*”).

¹¹ This is not a comprehensive list of the primary industries and associated SBA size standards of every possible manufacturer of ACS equipment or provider of ACS. This list is merely representative of some primary industries in which entities that manufacture ACS equipment or provide ACS may be primarily engaged. It is ultimately up to an entity seeking the temporary exemption to make a determination regarding their primary industry, and justify such determination in any enforcement proceeding.

¹² The definitions for each NAICS industry classification can be found by entering the six digit NAICS code in the “2007 NAICS Search” function available at the NAICS homepage, <http://www.census.gov/eos/www/naics/index.html>. The U.S. Office of Management and Budget has revised NAICS for 2012, however, the codes and industry categories listed herein are unchanged. OMB anticipates releasing a 2012 NAICS UNITED STATES MANUAL or supplement in January 2012. See *NAICS Final Decision*, 76 Fed. Reg. at 51240.

¹³ See 13 C.F.R. § 121.201 for a full listing of SBA size standards by six-digit NAICS industry code. The standards listed in this column establish the maximum size an entity in the given NAICS industry may be to qualify as a small business concern.

¹⁴ See accompanying *Report and Order* at Section III.A.

Equipment ¹⁵	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	334220	750 or fewer employees
	Electronic Computer Manufacturing	334111	1,000 or fewer employees
	Telephone Apparatus Manufacturing	334210	1,000 or fewer employees
	Other Communications Equipment Manufacturing	334290	750 or fewer employees
	Software Publishers	511210	\$25 million or less in annual receipts
	Internet Publishing and Broadcasting and Web Search Portals	519130	500 or fewer employees

6. The *Report and Order* indicated that this temporary exemption is self-executing. Under this approach, covered entities must determine whether they qualify for the exemption based upon their ability to meet the SBA's rules and the size standard for the relevant NAICS industry category for the industry in which they are primarily engaged. Entities that manufacture ACS equipment or provide ACS may raise this temporary exemption as a defense in an enforcement proceeding. Entities claiming the exemption must be able to demonstrate that they met the exemption criteria during the estimated start of the design phase of the lifecycle of the product or service that is the subject of the complaint. The *Report and Order* stated that if an entity no longer meets the exemption criteria, it must comply with Section 716 and Section 717 for all subsequent products or services or substantial upgrades of products or services that are in the development phase of the product or service lifecycle, or any earlier stages of development, at the time they no longer meet the criteria. The temporary exemption will begin on the effective date of the rules adopted in the *Report and Order*¹⁶ and will expire the earlier of the effective date of small entity exemption rules adopted pursuant to the *Further Notice* or October 8, 2013. The *Report and Order* states that the temporary exemption enables us to provide relief to those entities that may possibly lack legal, financial, or technical capability to comply with the Act until we further develop the record to determine whether small entities should be subject to a permanent exemption and, if so, the criteria to be used for defining which small entities should be subject to such permanent exemption.

7. In the *Further Notice* we seek comment on whether to make permanent the temporary exemption for manufacturers of ACS equipment and providers of ACS, adopt one or part of alternative size standards the Commission adopted in other contexts, or to adopt any permanent exemption for such entities, subject to repeal or modification by the Commission as necessary to meet Congress's intent.¹⁷ The *Further Notice* also seeks comment on the impact of an exemption on providers of ACS, manufacturers of ACS equipment, and consumers.

8. Specifically, the *Further Notice* seeks comment on whether to permanently exempt from the obligations of Section 716, manufacturers of ACS equipment and providers of ACS that qualify as small business concerns under the SBA's rules and size standards and, if so,

¹⁵ See accompanying *Report and Order* at Section III.A.

¹⁶ See accompanying *Report and Order* at Section III.A.5.

¹⁷ See 156 CONG. REC. H7168, H7176 (2010) (statement of Rep. Burgess) ("This bill recognizes that some small businesses and fledgling entrepreneurs may not be able to bear the financial burden of these new requirements, so there is the possibility of exemptions for small businesses."). See also *Report and Order* at Section III.C.3.

whether to utilize the size standards for the primary industry in which they are engaged under the SBA's rules as set forth in the accompanying *Report and Order* as explained above. The *Further Notice* notes that SBA criteria were established for the purpose of determining eligibility for SBA small business loans and asks whether these same criteria are appropriate for the purpose of relieving covered entities from the obligations associated with achievability analyses, recordkeeping, and certifications.

9. The *Further Notice* also seeks comment on alternative size standards that the Commission has adopted in other contexts. The Commission has adopted alternative size standards for very small and small businesses for eligibility for spectrum bidding credits. These alternative sizes include average gross revenue over the preceding three years of \$3 million, \$15 million, or \$40 million, depending on the wireless service. The Commission has also used a different size standard in the spectrum context, specifically for entities that, along with affiliates, have \$6 million or less in net worth and no more than \$2 million in annual profits (after federal income tax and excluding carry over losses) each year for the previous two years. The Commission has also used different size standards to define small cable companies and small cable systems, and the Act includes a definition of small cable system operators. The Commission has defined small cable companies as a cable company serving 400,000 or fewer subscribers nationwide, and small cable systems as a cable system serving 15,000 or fewer subscribers. The Act defines small cable system operators as "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹⁸ The *Further Notice* seeks comment on whether any of these alternatives – in whole, in part, or in combination – should form the basis for a permanent small entity exemption from the requirements of Section 716.

10. The *Further Notice* also asks if these size criteria are not appropriate for a permanent exemption, what the appropriate size criteria would be, and whether there are other criteria that should form the basis of a permanent exemption?

11. The *Further Notice* seeks comment on the impact of a permanent exemption on providers of ACS, manufacturers of ACS equipment, and consumers. Specifically, the *Further Notice* seeks comment on the qualitative and quantitative impact of a permanent exemption based on the temporary exemption, on any of the alternatives discussed, or on some other possible size standard will impact industry sectors engaged in ACS. For example, what percentage of, or which non-interconnected VoIP providers, wireline or wireless service providers, electronic messaging providers, and ACS equipment manufacturers would qualify as small business concerns under each size standard? Conversely, what percentage of or which providers of ACS or manufactures of equipment used for ACS are not small business concerns under each size standard? For each ACS and ACS equipment market segment, what percentage of the market is served by entities that are not exempt using each size standard?

12. The *Further Notice* also seeks comment on the compliance costs that ACS providers and ACS equipment manufacturers would incur absent a permanent exemption. What would the costs be for compliance with Section 716 and Section 717 across different providers of ACS and ACS equipment manufacturers if we decline to adopt any permanent exemption or decline to make the temporary exemption permanent? In particular, what are the costs of conducting an achievability analysis, recordkeeping, and providing certifications?

13. We note that, in addition to the small entity exemption provision, the CVAA sets

¹⁸ 47 U.S.C. § 543(m)(2).

forth achievability factors that may also mitigate adverse impacts and reduce burdens on small entities. Under the achievability factors, an otherwise covered entity can demonstrate that accessibility is unachievable and therefore avoid compliance. The first and second factors are particularly relevant to small entities and the special circumstances they face. The first factor considers the nature and cost of the steps needed to meet the requirements with respect to the specific equipment or service in question, and the second considers the technical and economic impact on the operation of the manufacturer or provider and on the operation of the specific equipment or service in question.

14. The *Further Notice* seeks further comment on several issues raised in the implementation of Section 716 and 717 of the Act, as well as to seek initial comment on implementing Section 718 of the Act. Specifically, the *Further Notice* seeks comment on three proposed alternative definitions for the term "interoperable" in the context of video conferencing services and equipment used for those services: (1) "interoperable" means able to function inter-platform, inter-network, and inter-provider; (2) "interoperable" means having published or otherwise agreed-upon standards that allow for manufacturers or service providers to develop products or services that operate with other equipment or services operating pursuant to the standards; or (3) "interoperable" means able to connect users among different video conferencing services, including VRS. The *Further Notice* also seeks comment on whether we should exercise our ancillary jurisdiction to require that a video mail service be accessible to individuals with disabilities when provided along with a video conferencing service as we did in the context of Section 255 in regard to voice mail. The *Further Notice* seeks comment on several proposals to (1) extend our accessibility of information content guidelines to cover additional concepts; (2) expand our definition of peripheral devices to include electronically mediated services; (3) expand our Part 6 requirements to include testable criteria. We also seek to develop a record on a proposal to define technical standards for safe harbors using the W3C/WAI Web guidelines or ISO/IEC 13066-1:2011. Finally, we seek comment on our proposal to implement Section 718 of the CVAA consistent with the recordkeeping requirements adopted in the *Report and Order*.

15. We seek comment on the preceding topics because even though at present we do not have enough information to propose a specific rule, we believe that during the effective period of the temporary small business exemption, information about these topics will in all likelihood become crucial and indeed determinative of how the implementation of the exemption will be carried out in concrete terms. For example, within the exemption period, technological innovations and advances may make interoperability more available in providing improved access to the deaf/blind community in service areas where interoperability is not yet feasible for technological reasons. Also, technological advances in coverage of video mail or in the availability of safe harbors may become more available and more efficiently operational after the exemption period than they are at present, and thus, during the temporary exemption, these various areas of increased availability and increased effective impact may affect the provision of ACS to the deaf and/or blind community. Hence, because these topics may become pivotal and crucial after the exemption period, we choose to seek comment on these topics at this time because based on our assessment of the admittedly scant record to date, we conclude that such comment may effectively guide the Commission toward a more comprehensive and efficient implementation of the temporary exemption. We also seek comment on implementing Section 718, which requires a mobile phone manufacturer that includes a browser, or a mobile phone service provider that arranges for a browser to be included on a mobile phone, to ensure that the browser functions are accessible to and usable by individuals who are blind or have a visual

impairment, unless doing so is not achievable.¹⁹ Under Section 718, mobile phone manufacturers or service providers may achieve compliance by relying on third party applications, peripheral devices, software, hardware, or customer premises equipment. Congress provided that the effective date for these requirements is three years after the enactment of the CVAA, *i.e.*, October 8, 2013.

B. Legal Basis

16. The legal basis for any action that may be taken pursuant to the *Further Notice* is contained in Sections 1-4, 255, 303(r), 403, 503, 716, 717, 718 of the Communications Act of 1934, as Amended, 47 U.S.C. §§ 151-154, 255, 303(r), 403, 503, 617, 618, 619.

C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

17. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that face possible significant economic impact by the adoption of proposed rules.²⁰ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”²¹ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.²² A “small business concern” is one that (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.²³

18. To assist the Commission in analyzing the total number of small entities potentially affected by the proposals in the *Further Notice*, we ask commenters to estimate the number of small entities that may be affected. To assist in assessing the nature and number of small entities that face possible significant economic impact by the proposals in the *Further Notice*, we seek comment on the industry categories below and our estimates of the entities in each category that can, under relevant SBA standards or standards previously approved by the SBA for small businesses, be classified as small. Where a commenter proposes an exemption from the requirements of Section 716 and in effect Section 717, we also seek estimates from that commenter on the number of small entities in each category that would be exempted from compliance with Section 716 and in effect Section 717 under the proposed exemption, the percentage of market share for the service or product that would be exempted, and the economic impact, if any, on those entities that are not covered by the proposed exemption. While the *Further Notice* and this IRFA seek comment on whether and how the Commission should

¹⁹ See 47 U.S.C. § 619(a); see also House Report at 27 (“The Committee also intends that the service provider and the manufacturer are each only subject to these provisions with respect to a browser that such service provider or manufacturer directs or specifies to be included in the device.”).

²⁰ 5 U.S.C. § 604(a)(3).

²¹ 5 U.S.C. § 601(6).

²² 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).

²³ 15 U.S.C. § 632.

permanently exempt small entities from the requirements of Section 716 and in effect Section 717 for the purposes of building a record on that issue, we will assume, for the narrow purpose of including a thorough regulatory impact analysis in this IRFA, that no such exemptions will be provided.

19. Many of the issues raised in the *Further Notice* relate to clarifying obligations on entities already covered by the *Report and Order*, which may affect a broad range of service providers and equipment manufacturers. The *Further Notice* seeks comment on making permanent a temporary exemption for small entities that qualify as small business concerns under the SBA's rules and small business size standards, or some other criteria. Therefore, it is possible that all entities that would be required to comply with Section 716 and Section 717, but are small business concerns or qualify as small entities under some other criteria, will be exempt from the provisions of the proposed rules implementing Section 716 and Section 717. The CVAA, however, does not provide the flexibility for the Commission to adopt an exemption for small entities from compliance with Section 718. Therefore, we estimate below the impact on small entities absent a permanent exemption from Section 716 and Section 717, and small entities that may have to comply with Section 718. Specifically, we analyze the number of small businesses engaged in manufacturing that may be affected by the *Further Notice*, absent a permanent small entity exemption, including manufacturers of equipment used to provide interconnected and non-interconnected VoIP, electronic messaging, and interoperable video conferencing services. We then analyze the number of small businesses engaged as service providers that may be affected by the *Report and Order*, absent a permanent small entity exemption, including providers of interconnected and non-interconnected VoIP, electronic messaging services, interoperable video conferencing services, wireless services, wireline services, and other relevant services.

20. *Small Businesses, Small Organizations, and Small Governmental Jurisdictions.* Our action may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards.²⁴ First, nationwide, there are a total of approximately 27.5 million small businesses, according to the SBA.²⁵ In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."²⁶ Nationwide, as of 2007, there were approximately 1,621,315 small organizations.²⁷ Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."²⁸ Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States.²⁹ We estimate that, of this total, as many as 88,506 entities may qualify as "small governmental jurisdictions."³⁰ Thus, we estimate that most governmental jurisdictions are small.

²⁴ See 5 U.S.C. §§ 601(3)–(6).

²⁵ See SBA, Office of Advocacy, "Frequently Asked Questions," <http://web.sba.gov/faqs> (last visited May 6, 2011) (figures are from 2009).

²⁶ 5 U.S.C. § 601(4).

²⁷ INDEPENDENT SECTOR, THE NEW NONPROFIT ALMANAC & DESK REFERENCE (2010).

²⁸ 5 U.S.C. § 601(5).

²⁹ U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2011, Table 427 (2007).

³⁰ The 2007 U.S. Census data for small governmental organizations are not presented based on the size of the population in each such organization. There were 89,476 small governmental organizations in 2007. If we assume that county, municipal, township and school district organizations are more likely than larger (continued....)

1. Equipment Manufacturers

a. Manufacturers of Equipment to Provide VoIP

21. Entities manufacturing equipment used to provide interconnected VoIP, non-interconnected VoIP, or both are generally found in one of two Census Bureau categories, “Electronic Computer Manufacturing”³¹ or “Telephone Apparatus Manufacturing.”³² We include here an analysis of the possible significant economic impact of our proposed rules on manufacturers of equipment used to provide both interconnected and non-interconnected VoIP because it is not possible to separate available data on these two manufacturing categories for VoIP equipment. Our estimates below likely greatly overstate the number of small entities that manufacture equipment used to provide ACS, including interconnected VoIP. However, in the absence of more accurate data, we present these figures to provide as thorough an analysis of the impact on small entities as possible.

22. *Electronic Computer Manufacturing.* The Census Bureau defines this category to include “establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid . . . The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.”³³

23. In this category, the SBA deems an electronic computer manufacturing business to be small if it has 1,000 employees or less.³⁴ For this category of manufacturers, Census data for 2007 show that there were 421 establishments that operated that year. Of those 421, 384 had 100 or fewer employees and 37 had 100 or more employees.³⁵ On this basis, we estimate that the majority of manufacturers of equipment used to provide electronic messaging services in this category are small.

24. *Telephone Apparatus Manufacturing.* The Census Bureau defines this category to comprise “establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone
(Continued from previous page)

governmental organizations to have populations of 50,000 or less, the total of these organizations is 52,125. If we make the same assumption about special districts, and also assume that special districts are different from county, municipal, township, and school districts, in 2007 there were 37,381 special districts. Therefore, of the 89,476 small governmental organizations documented in 2007, as many as 89,506 may be considered small under the applicable standard. This data may overestimate the number of such organizations that has a population of 50,000 or less. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES 2011, Tables 427, 426 (data cited therein are from 2007).

³¹ U.S. Census Bureau, 2007 NAICS Definitions, 334111 Electronic Computer Manufacturing, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=334111&search=2007%20NAICS%20Search>.

³² U.S. Census Bureau, 2007 NAICS Definitions, 334210 Telephone Apparatus Manufacturing, <http://www.census.gov/naics/2007/def/ND334210.HTM>.

³³ U.S. Census Bureau, 2007 NAICS Definitions, 334111 Electronic Computer Manufacturing, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=334111&search=2007%20NAICS%20Search>.

³⁴ 13 C.F.R. 121.201, NAICS Code 334111.

³⁵ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=300&-ds_name=EC073111&-_lang=en

answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.”³⁶

25. In this category, the SBA deems a telephone apparatus manufacturing business to be small if it has 1,000 or fewer employees.³⁷ For this category of manufacturers, Census data for 2007 shows there were 398 such establishments in operation.³⁸ Of those 398 establishments, 393 (approximately 99%) had 1,000 or fewer employees and, thus, would be deemed small under the applicable SBA size standard.³⁹ On this basis, the Commission estimates that approximately 99% or more of the manufacturers of equipment used to provide VoIP in this category are small.

b. Manufacturers of Equipment to Provide Electronic Messaging

26. Entities that manufacture equipment (other than software) used to provide electronic messaging services are generally found in one of three Census Bureau categories: “Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing,”⁴⁰ “Electronic Computer Manufacturing,”⁴¹ or “Telephone Apparatus Manufacturing.”⁴²

27. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.” The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 919 establishments in this category that operated for part or all of the entire year. Of this total, 771 had less than 100 employees and 148 had more than 100 employees.⁴³ Thus, under this size standard, the majority of firms can be considered small.

28. *Electronic Computer Manufacturing.* The Census Bureau defines this category to include “establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers.

³⁶ U.S. Census Bureau, 2007 NAICS Definitions, 334210 Telephone Apparatus Manufacturing, <http://www.census.gov/naics/2007/def/ND334210.HTM>.

³⁷ 13 C.F.R. § 121.201, NAICS Code 334210.

³⁸ U.S. Census Bureau, American FactFinder, 2007 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334210 (rel. Nov. 16, 2010); <http://factfinder.census.gov>.

³⁹ *Id.*

⁴⁰ U.S. Census Bureau, 2007 NAICS Definitions, 334220 Radio and Television Broadcasting and Wireless Communications Equipment, <http://www.census.gov/econ/industry/def/d334220.htm>.

⁴¹ U.S. Census Bureau, 2007 NAICS Definitions, 334111 Electronic Computer Manufacturing, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=334111&search=2007%20NAICS%20Search>.

⁴² U.S. Census Bureau, 2007 NAICS Definitions, 334210 Telephone Apparatus Manufacturing, <http://www.census.gov/naics/2007/def/ND334210.HTM>.

⁴³ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=300&-ds_name=EC0731I1&-_lang=en.

Computers can be analog, digital, or hybrid. . . . The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.”⁴⁴

29. In this category the SBA deems an electronic computer manufacturing business to be small if it has 1,000 or fewer employees.⁴⁵ For this category of manufacturers, Census data for 2007 show that there were 421 such establishments that operated that year. Of those 421 establishments, 384 had 1,000 or fewer employees.⁴⁶ On this basis, we estimate that the majority of the manufacturers of equipment used to provide electronic messaging services in this category are small.

30. *Telephone Apparatus Manufacturing.* The Census Bureau defines this category to comprise “establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.”⁴⁷

31. In this category the SBA deems a telephone apparatus manufacturing business to be small if it has 1,000 or fewer employees.⁴⁸ For this category of manufacturers, Census data for 2007 shows that there were 398 such establishments that operated that year.⁴⁹ Of those 398 establishments, 393 (approximately 99%) had 1,000 or fewer employees and, thus, would be deemed small under the applicable SBA size standard.⁵⁰ On this basis, the Commission estimates that approximately 99% or more of the manufacturers of equipment used to provide electronic messaging services in this category are small.

c. Manufacturers of Equipment Used to Provide Interoperable Video Conferencing Services

32. Entities that manufacture equipment used to provide interoperable and other video conferencing services are generally found in the Census Bureau category: “Other Communications Equipment Manufacturing.” The Census Bureau defines this category to include: “establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications

⁴⁴ U.S. Census Bureau, 2007 NAICS Definitions, 334111 Electronic Computer Manufacturing, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=334111&search=2007%20NAICS%20Search>.

⁴⁵ 13 C.F.R. § 121.201, NAICS Code 334111.

⁴⁶ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=300&-ds_name=EC0731I1&-lang=en.

⁴⁷ U.S. Census Bureau, 2007 NAICS Definitions, 334210 Telephone Apparatus Manufacturing, <http://www.census.gov/naics/2007/def/ND334210.HTM>.

⁴⁸ 13 C.F.R. § 121.201, NAICS Code 334210.

⁴⁹ U.S. Census Bureau, American FactFinder, 2007 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334111 (rel. Nov. 16, 2010); <http://factfinder.census.gov>.

⁵⁰ *Id.*

equipment).”⁵¹

33. *Other Communications Equipment Manufacturing.* In this category, the SBA deems a business manufacturing other communications equipment to be small if it has 750 or fewer employees.⁵² For this category of manufacturers, Census data for 2007 show that there were 452 establishments that operated that year. Of the 452 establishments 406 had fewer than 100 employees and 46 had more than 100 employees. Accordingly, the Commission estimates that a substantial majority of the manufacturers of equipment used to provide interoperable and other video-conferencing services are small.⁵³

2. Service Providers

a. Providers of VoIP

34. Entities that provide interconnected or non-interconnected VoIP or both are generally found in one of two Census Bureau categories, “Wired Telecommunications Carriers” or “All Other Telecommunications.”

35. *Wired Telecommunications Carriers.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”⁵⁴

36. In this category, the SBA deems a wired telecommunications carrier to be small if it has 1,500 or fewer employees.⁵⁵ Census data for 2007 shows 3,188 firms in this category⁵⁶ Of these 3,188 firms, only 44 had 1,000 or more employees. While we could not find precise Census data on the number of firms with in the group with 1,500 or fewer employees, it is clear that at least 3,144 firms with fewer than 1,000 employees would be in that group. On this basis, the Commission estimates that a substantial majority of the providers of interconnected VoIP, non-interconnected VoIP, or both in this category, are small.⁵⁷

⁵¹ U.S. Census Bureau, 2007 NAICS Definitions, 334290 Other communications equipment manufacturing, <http://www.census.gov/econ/industry/def/d334290.htm>.

⁵² 13 C.F.R. 121.201, NAICS Code 334220.

⁵³ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=300&-ds_name=EC0731I1&-_lang=en.

⁵⁴ U.S. Census Bureau, 2007 NAICS Definitions, 517110 Wired Telecommunications Carriers, <http://www.census.gov/econ/industry/def/d517110.htm>.

⁵⁵ 13 C.F.R. § 121.201, NAICS Code 517110.

⁵⁶ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

⁵⁷ *Id.* As noted in para. 21 above with regard to the distinction between manufacturers of equipment used to provide interconnected VoIP and manufactures of equipment to provide non-interconnected VoIP, our estimates of the number of the number of providers of non-interconnected VoIP (and the number of small (continued....))

37. *All Other Telecommunications.* Under the 2007 U.S. Census definition of firms included in the category “All Other Telecommunications (NAICS Code 517919)” comprises “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.”⁵⁸

38. In this category, the SBA deems a provider of “all other telecommunications” services to be small if it has \$25 million or less in average annual receipts.⁵⁹ For this category of service providers, Census data for 2007 shows that there were 2,383 such firms that operated that year.⁶⁰ Of those 2,383 firms, 2,346 (approximately 98%) had \$25 million or less in average annual receipts and, thus, would be deemed small under the applicable SBA size standard. On this basis, Commission estimates that approximately 98% or more of the providers of interconnected VoIP, non-interconnected VoIP, or both in this category are small.⁶¹

b. Providers of Electronic Messaging Services

39. Entities that provide electronic messaging services are generally found in one of the following Census Bureau categories, “Wireless Telecommunications Carriers (except Satellites),” “Wired Telecommunications,” or “Internet Publishing and Broadcasting and Web Search Portals.”

40. *Wireless Telecommunications Carriers (except Satellite).* Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.⁶² Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”⁶³ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.⁶⁴ For the (Continued from previous page)

entities within that group) are likely overstated because we could not draw in the data a distinction between such providers and those that provide interconnected VoIP. However, in the absence of more accurate data, we present these figures to provide as thorough an analysis of the impact on small entities as we can at this time.

⁵⁸ U.S. Census Bureau, 2007 NAICS Definitions, 517919 All Other Telecommunications, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search>.

⁵⁹ 13 C.F.R. § 121.201, NAICS Code 517919.

⁶⁰ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.

⁶¹ See discussion *supra* note 57, regarding possible overestimation of firms and small entities providing non-interconnected VoIP services.

⁶² U.S. Census Bureau, 2007 NAICS Definitions, 517210 Wireless Telecommunications Carriers (Except Satellite), <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

⁶³ U.S. Census Bureau, 2002 NAICS Definitions, 517211 Paging, <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

⁶⁴ 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007 shows that there were 1,383 firms that operated that year.⁶⁵ Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service ("PCS"), and Specialized Mobile Radio ("SMR") Telephony services.⁶⁶ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.⁶⁷ Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

41. *Wired Telecommunications Carriers.* For the 2007 US Census definition of firms included in the category, "Wired Telecommunications Carriers (NAICS Code 517110)," see paragraph 35 above.

42. In this category, the SBA deems a wired telecommunications carrier to be small if it has 1,500 or fewer employees.⁶⁸ Census data for 2007 shows 3,188 firms in this category.⁶⁹ Of these 3,188 firms, only 44 (approximately 1%) had 1,000 or more employees.⁷⁰ While we could not find precise Census data on the number of firms in the group with 1,500 or fewer employees, it is clear that at least the 3,188 firms with fewer than 1,000 employees would be in that group. Thus, at least 3,144 of these 3,188 firms (approximately 99%) had 1,500 or fewer employees. On this basis, the Commission estimates that approximately 99% or more of the providers of electronic messaging services in this category are small.

43. *Internet Publishing and Broadcasting and Web Search Portals.* The Census Bureau defines this category to include "establishments primarily engaged in 1) publishing and/or broadcasting content on the Internet exclusively or 2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals). The publishing and broadcasting establishments in this industry do not provide traditional (non-Internet) versions of the content that they publish or broadcast. They provide textual, audio, and/or video content of general or specific interest on the Internet exclusively. Establishments known as Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users."⁷¹

44. In this category, the SBA deems an Internet publisher or Internet broadcaster or

⁶⁵ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=700&-ds_name=EC0751SSSZ5&-lang=en.

⁶⁶ See *Trends in Telephone Service*, at tbl. 5.3.

⁶⁷ *Id.*

⁶⁸ 13 C.F.R. § 121.201, NAICS Code 517110.

⁶⁹ U.S. Census Bureau, American FactFinder, 2007 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 517110 (rel. Nov. 19, 2010); <http://factfinder.census.gov>.

⁷⁰ *Id.*

⁷¹ U.S. Census Bureau, 2007 NAICS Definitions, 519130 Internet Publishing and Broadcasting and Web Search Portals, <http://www.naics.com/censusfiles/ND519130.HTM>.

the provider of a web search portal on the Internet to be small if it has 500 or fewer employees.⁷² For this category of manufacturers, Census data for 2007 shows that there were 2,705 such firms that operated that year.⁷³ Of those 2,705 firms, 2,682 (approximately 99%) had 500 or fewer employees and, thus, would be deemed small under the applicable SBA size standard.⁷⁴ On this basis, the Commission estimates that approximately 99% or more of the providers of electronic messaging services in this category are small.

45. *Data Processing, Hosting, and Related Services.* The Census Bureau defines this category to include “establishments primarily engaged in providing infrastructure for hosting or data processing services. These establishments may provide specialized hosting activities, such as web hosting, streaming services or application hosting; provide application service provisioning; or may provide general time-share mainframe facilities to clients. Data processing establishments provide complete processing and specialized reports from data supplied by clients or provide automated data processing and data entry services.”⁷⁵

46. In this category, the SBA deems a data processing, hosting, or related services provider to be small if it has \$25 million or less in annual receipts.⁷⁶ For this category of providers, Census data for 2007 shows that there were 14,193 such establishments that operated that year.⁷⁷ Of those 14,193 firms, 12,985 had less than \$10 million in annual receipts, and 1,208 had greater than \$10 million.⁷⁸ Although no data is available to confirm the number of establishments with greater than \$25 million in receipts, the available data confirms the majority of establishments in this category were small. On this basis, the Commission estimates that approximately 96% of the providers of electronic messaging services in this category are small.

c. Providers of Interoperable Video Conferencing Services

47. Entities that provide interoperable video conferencing services are found in the Census Bureau Category “All Other Telecommunications.”

48. *All Other Telecommunications.* For the 2007 US Census definition of firms included in the category, “All Other Telecommunications (NAICS Code 517919),” see paragraph 37 above.

49. In this category, the SBA deems a provider of “all other telecommunications” services to be small if it has \$25 million or less in average annual receipts.⁷⁹ Census data for

⁷² 13 C.F.R. § 121.201, NAICS Code 519130.

⁷³ U.S. Census Bureau, American FactFinder, 2007 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 519130 (rel. Nov. 19, 2010); <http://factfinder.census.gov>.

⁷⁴ *Id.*

⁷⁵ U.S. Census Bureau, 2007 NAICS Definition, 518210 Data Processing, Hosting, and Related Services, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

⁷⁶ 13 C.F.R. § 121.201; NAICS Code 518210.

⁷⁷ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=800&-ds_name=EC0751SSSZ1&-_lang=en.

⁷⁸ *Id.*

⁷⁹ 13 C.F.R. § 121.201, NAICS Code 517919.

2007 show that there were 2,383 such firms that operated that year.⁸⁰ Of those 2,383 firms, 2,346 (approximately 98%) had \$25 million or less in average annual receipts and, thus, would be deemed small under the applicable SBA size standard. On this basis, Commission estimates that approximately 98% or more of the providers of interoperable video conferencing services are small.

3. Additional Industry Categories.

a. Certain Wireless Carriers and Service Providers

50. *Cellular Licensees.* The SBA has developed a small business size standard for small businesses in the category “Wireless Telecommunications Carriers (except satellite).”⁸¹ Under that SBA category, a business is small if it has 1,500 or fewer employees.⁸² The census category of “Cellular and Other Wireless Telecommunications” is no longer used and has been superseded by the larger category “Wireless Telecommunications Carriers (except satellite).” The Census Bureau defines this larger category to include “establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services.”⁸³

51. Census data for 2007 shows 1,383 firms in this category.⁸⁴ Of these 1,383 firms, only 15 (approximately 1%) had 1,000 or more employees.⁸⁵ While there is no precise Census data on the number of firms the group with 1,500 or fewer employees, it is clear that at least the 1,368 firms with fewer than 1,000 employees would be found in that group. Thus, at least 1,368 of these 1,383 firms (approximately 99%) 1,500 or fewer employees. On this basis, Commission estimates that approximately 99% or more of the providers of electronic messaging services in this category are small.

52. *Specialized Mobile Radio.* The Commission awards “small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.⁸⁶ The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.⁸⁷ The SBA has approved these small business size standards for the 900 MHz Service.⁸⁸ The

⁸⁰ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.

⁸¹ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517210.

⁸² *Id.*

⁸³ U.S. Census Bureau, 2007 NAICS Definitions, Wireless Telecommunications Carriers (Except Satellites) <http://www.census.gov/econ/industry/def/d517210.htm>.

⁸⁴ U.S. Census Bureau, American FactFinder, 2007 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 517210 (rel. Nov. 19, 2010); <http://factfinder.census.gov>.

⁸⁵ *Id.*

⁸⁶ 47 C.F.R. § 90.814(b)(1).

⁸⁷ *Id.*

⁸⁸ See Letter from Aida Alvarez, Administrator, Small Business Administration, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, dated August 10, 1999.

Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.⁸⁹ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 licenses. One bidder claiming small business status won five licenses.⁹⁰

53. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders that won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

54. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR services pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1,500 or fewer employees. The Commission assumes, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities.

55. *AWS Services (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3)).* For the AWS-1 bands, the Commission has defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million.⁹¹ In 2006, the Commission conducted its first auction of AWS-1 licenses.⁹² In that initial AWS-1 auction, 31 winning bidders identified themselves as very small businesses.⁹³ Twenty-six of the winning bidders identified themselves

⁸⁹ See *Correction to Public Notice DA 96-586, FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas*, Public Notice, 18 FCC Rcd 18367 (WTB 1996).

⁹⁰ See *Multi-Radio Service Auction Closes*, Public Notice, 17 FCC Rcd 1446 (WTB 2002).

⁹¹ See *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, Report and Order*, 18 FCC Rcd 25,162, App. B (2003), *modified by Service Rules for Advanced Wireless Services In the 1.7 GHz and 2.1 GHz Bands, Order on Reconsideration*, 20 FCC Rcd 14,058, App. C (2005).

⁹² See *Auction of Advanced Wireless Services Licenses Scheduled for June 29, 2006; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction No. 66*, AU Docket No. 06-30, Public Notice, 21 FCC Rcd 4562 (2006) (“*Auction 66 Procedures Public Notice*”).

⁹³ See *Auction of Advanced Wireless Services Licenses Closes; Winning Bidders Announced for Auction No. 66*, Public Notice, 21 FCC Rcd 10,521 (2006) (“*Auction 66 Closing Public Notice*”).

as small businesses.⁹⁴ In a subsequent 2008 auction, the Commission offered 35 AWS-1 licenses.⁹⁵ Four winning bidders identified themselves as very small businesses, and three of the winning bidders identified themselves as a small business.⁹⁶ For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but has proposed to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.⁹⁷

56. *700 MHz Guard Band Licenses.* In the *700 MHz Guard Band Order*, the Commission adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁹⁸ A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.⁹⁹ Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁰⁰ SBA approval of these definitions is not required.¹⁰¹ In

⁹⁴ See *id.*

⁹⁵ See *AWS-1 and Broadband PCS Procedures Public Notice*, 23 FCC Rcd at 7499. Auction 78 also included an auction of broadband PCS licenses.

⁹⁶ See *Auction of AWS-1 and Broadband PCS Licenses Closes, Winning Bidders Announced for Auction 78, Down Payments Due September 9, 2008, FCC Forms 601 and 602 Due September 9, 2008, Final Payments Due September 23, 2008, Ten-Day Petition to Deny Period*, Public Notice, 23 FCC Rcd 12,749 (2008).

⁹⁷ *Service Rules for Advanced Wireless Services in the 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz Bands et al.*, Notice of Proposed Rulemaking, 19 FCC Rcd 19,263, App. B (2005); *Service Rules for Advanced Wireless Services in the 2155–2175 MHz Band*, Notice of Proposed Rulemaking, 22 FCC Rcd 17,035, App. (2007); *Service Rules for Advanced Wireless Services in the 2155–2175 MHz Band*, Further Notice of Proposed Rulemaking, 23 FCC Rcd 9859, App. B (2008).

⁹⁸ *Service Rules for the 746–764 MHz Bands, and Revisions to Part 27 of the Commission’s Rules*, Second Report and Order, 15 FCC Rcd 5299 (2000). Service rules were amended in 2007, but no changes were made to small business size categories. See *Service Rules for the 698–746, 747–762 and 777–792 MHz Bands*, WT Docket No. 06–150, *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94–102, Section 68.4(a) of the Commission’s Rules *Governing Hearing Aid-Compatible Telephones*, WT Docket No. 01–309, *Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services*, WT Docket 03–264, *Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules*, WT Docket No. 06–169, *Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, PS Docket No. 06–229, *Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010*, WT Docket No. 96–86, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 8064 (2007).

⁹⁹ *Id.* at 5343 ¶ 108.

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 5343 ¶ 108 n.246 (for the 746–764 MHz and 776–704 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

2000, the Commission conducted an auction of 52 Major Economic Area (“MEA”) licenses.¹⁰² Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced and closed in 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.¹⁰³

57. *Upper 700 MHz Band Licenses.* In the *700 MHz Second Report and Order*, the Commission revised its rules regarding Upper 700 MHz licenses.¹⁰⁴ On January 24, 2008, the Commission commenced Auction 73 in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C Block, and one nationwide license in the D Block.¹⁰⁵ The auction concluded on March 18, 2008, with 3 winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.

58. *Lower 700 MHz Band Licenses.* The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.¹⁰⁶ The Commission defined a “small business” as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.¹⁰⁷ A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁰⁸ Additionally, the lower 700 MHz Service had a third category of small business status for Metropolitan/Rural Service Area (MSA/RSA) licenses—“entrepreneur”—which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.¹⁰⁹ The SBA approved these small size standards.¹¹⁰ An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) was conducted in 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won licenses.¹¹¹ A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses.¹¹² Seventeen winning bidders claimed small or very small business status, and nine winning bidders

¹⁰² See *700 MHz Guard Bands Auction Closes: Winning Bidders Announced*, Public Notice, 15 FCC Rcd 18026 (2000).

¹⁰³ See *700 MHz Guard Bands Auction Closes: Winning Bidders Announced*, Public Notice, 16 FCC Rcd 4590 (WTB 2001).

¹⁰⁴ *700 MHz Second Report and Order*, 22 FCC Rcd 15289.

¹⁰⁵ See *Auction of 700 MHz Band Licenses Closes*, Public Notice, 23 FCC Rcd 4572 (WTB 2008).

¹⁰⁶ See *Reallocation and Service Rules for the 698–746 MHz Spectrum Band (Television Channels 52–59)*, Report and Order, 17 FCC Rcd 1022 (2002) (“*Channels 52–59 Report and Order*”).

¹⁰⁷ See *id.*, 17 FCC Rcd at 1087–88 ¶ 172.

¹⁰⁸ See *id.*

¹⁰⁹ See *id.*, 17 FCC Rcd at 1088 ¶ 173.

¹¹⁰ See *Alvarez Letter 1998*.

¹¹¹ See *Lower 700 MHz Band Auction Closes*, Public Notice, 17 FCC Rcd 17,272 (2002).

¹¹² See *Lower 700 MHz Band Auction Closes*, Public Notice, 18 FCC Rcd 11,873 (2003).

claimed entrepreneur status.¹¹³ In 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz band. All three winning bidders claimed small business status.

59. In 2007, the Commission reexamined its rules governing the 700 MHz band in the *700 MHz Second Report and Order*.¹¹⁴ An auction of A, B and E block 700 MHz licenses was held in 2008.¹¹⁵ Twenty winning bidders claimed small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years). Thirty three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years).

60. *Offshore Radiotelephone Service*. This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico. There are presently approximately 55 licensees in this service. The Commission is unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for the category of Wireless Telecommunications Carriers (except Satellite). Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees. Census data for 2007 show that there were 1,383 firms that operated that year. Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees.¹¹⁶ Thus under this category and the associated small business size standard, the majority of firms can be considered small.

61. *Government Transfer Bands*. The Commission adopted small business size standards for the unpaired 1390-1392 MHz, 1670-1675 MHz, and the paired 1392-1395 MHz and 1432-1435 MHz bands.¹¹⁷ Specifically, with respect to these bands, the Commission defined an entity with average annual gross revenues for the three preceding years not exceeding \$40 million as a "small business," and an entity with average annual gross revenues for the three preceding years not exceeding \$15 million as a "very small business."¹¹⁸ SBA has approved these small

¹¹³ See *id.*

¹¹⁴ *700 MHz Second Report and Order*, Second Report and Order, 22 FCC Rcd 15,289, 15,359 n.434 (2007).

¹¹⁵ See *Auction of 700 MHz Band Licenses Closes*, Public Notice, 23 FCC Rcd 4572 (2008).

¹¹⁶ U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

¹¹⁷ See *Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, Report and Order, 17 FCC Rcd 9980 (2002).

¹¹⁸ See *Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, WT Docket No. 02-8, Notice of Proposed Rulemaking, 17 FCC Rcd 2500, 2550-51 ¶¶ 144-146 (2002). To be consistent with the size standard of "very small business" proposed for the 1427-1432 MHz band for those entities with average gross revenues for the three preceding years not exceeding \$3 million, the Service Rules Notice proposed to use the terms "entrepreneur" and "small business" to define entities with average gross revenues for the three preceding years not exceeding \$40 million and \$15 million, respectively. Because the Commission is not adopting small business size standards for the 1427-1432 MHz band, it instead uses the terms "small business" and "very small business" to define entities with average gross revenues for the three preceding years not exceeding \$40 million and \$15 million, respectively.

business size standards for the aforementioned bands.¹¹⁹ Correspondingly, the Commission adopted a bidding credit of 15 percent for “small businesses” and a bidding credit of 25 percent for “very small businesses.”¹²⁰ This bidding credit structure was found to have been consistent with the Commission’s schedule of bidding credits, which may be found at section 1.2110(f)(2) of the Commission’s rules.¹²¹ The Commission found that these two definitions will provide a variety of businesses seeking to provide a variety of services with opportunities to participate in the auction of licenses for this spectrum and will afford such licensees, who may have varying capital costs, substantial flexibility for the provision of services.¹²² The Commission noted that it had long recognized that bidding preferences for qualifying bidders provide such bidders with an opportunity to compete successfully against large, well-financed entities.¹²³ The Commission also noted that it had found that the use of tiered or graduated small business definitions is useful in furthering its mandate under Section 309(j) of the Act to promote opportunities for and disseminate licenses to a wide variety of applicants.¹²⁴ An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded. The winning bidder was not a small entity.

b. Certain Equipment Manufacturers and Stores

62. *Part 15 Handset Manufacturers.* Manufacturers of unlicensed wireless handsets may also become subject to requirements in this proceeding for their handsets used to provide VoIP applications. The Commission has not developed a definition of small entities applicable to unlicensed communications handset manufacturers. Therefore, we will utilize the SBA definition applicable to Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones,

¹¹⁹ See Letter from Hector V. Barreto, Administrator, Small Business Administration, to Margaret W. Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, dated Jan. 18, 2002.

¹²⁰ Such bidding credits are codified for the unpaired 1390-1392 MHz, paired 1392-1395 MHz, and the paired 1432-1435 MHz bands in 47 C.F.R. § 27.807. Such bidding credits are codified for the unpaired 1670-1675 MHz band in 47 C.F.R. § 27.906.

¹²¹ In the *Part 1 Third Report and Order*, the Commission adopted a standard schedule of bidding credits, the levels of which were developed based on its auction experience. *Part 1 Third Report and Order*, 13 FCC Rcd at 403-04 ¶ 47; see also 47 C.F.R. § 1.2110(f)(2).

¹²² See *Service Rules Notice*, 17 FCC Rcd at 2550-51 ¶ 145.

¹²³ See, e.g., *Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, WT Docket No. 96-18, PR Docket No. 93-253, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, 10091 ¶ 112 (1999).

¹²⁴ 47 U.S.C. § 309(j)(3)(B), (4)(C)-(D). The Commission will also not adopt special preferences for entities owned by minorities or women, and rural telephone companies. The Commission did not receive any comments on this issue, and it does not have an adequate record to support such special provisions under the current standards of judicial review. See *Adarand Constructors v. Peña*, 515 U.S. 200 (1995) (requiring a strict scrutiny standard of review for government mandated race-conscious measures); *United States v. Virginia*, 518 U.S. 515 (1996) (applying an intermediate standard of review to a state program based on gender classification).

mobile communications equipment, and radio and television studio and broadcasting equipment.”¹²⁵ The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.¹²⁶ According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. Of this total, 784 had less than 500 employees and 155 had more than 100 employees.¹²⁷ Thus, under this size standard, the majority of firms can be considered small.

63. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.” The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. Of this total, 784 had less than 500 employees and 155 had more than 100 employees.”¹²⁸ Thus, under this size standard, the majority of firms can be considered small.

64. *Radio, Television, and Other Electronics Stores.* The Census Bureau defines this economic census category as follows: “This U.S. industry comprises: (1) establishments known as consumer electronics stores primarily engaged in retailing a general line of new consumer-type electronic products; (2) establishments specializing in retailing a single line of consumer-type electronic products (except computers); or (3) establishments primarily engaged in retailing these new electronic products in combination with repair services.”¹²⁹ The SBA has developed a small business size standard for Radio, Television, and Other Electronics Stores, which is: all such firms having \$9 million or less in annual receipts.¹³⁰ According to Census Bureau data for 2007, there were 24,912 firms in this category that operated for the entire year.¹³¹ Of this total, 22,701 firms had annual sales of under \$5 million; 570 had annual sales and 533 firms had sales of \$5 million or more but less than \$10 million., and 1,641 had annual sales of over 10 million.¹³²

¹²⁵ U.S. Census Bureau, 2002 NAICS Definitions, 334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

¹²⁶ 13 C.F.R. § 121.201, NAICS code 334220.

¹²⁷ The NAICS Code for this service is 334220. See 13 C.F.R 121/201. See also http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=500&-ds_name=EC0744SSSZ1&-_lang=en.

¹²⁸ The NAICS Code for this service 334220. See 13 C.F.R 121/201. See also http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=500&-ds_name=EC0744SSSZ1&-_lang=en.

¹²⁹ <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=443112&search=2007%20NAICS%20Search>.

¹³⁰ 13 C.F.R. § 121.201, NAICS code 443112.

¹³¹ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=500&-ds_name=EC0744SSSZ1&-_lang=en.

¹³² *Id.*

Thus, the majority of firms in this category can be considered small.

c. Wireline Carriers and Service Providers

65. *Incumbent Local Exchange Carriers (Incumbent LECs).* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹³³ Census Bureau data for 2007 shows that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had employment of 1000 or more. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.¹³⁴ Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.¹³⁵ Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules proposed in the NPRM. Thus under this category, the majority of these incumbent local exchange service providers can be considered small.¹³⁶

66. *Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹³⁷ Census Bureau data for 2007 show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Competitive LECs, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers can be considered small entities.¹³⁸ According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services.¹³⁹ Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.¹⁴⁰ In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees.¹⁴¹ In addition, 72 carriers have reported that they are Other Local Service Providers.¹⁴² Of the 72, seventy have 1,500 or

¹³³ 13 C.F.R. § 121.201, NAICS code 517110.

¹³⁴ See *Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

¹³⁵ See *id.*

¹³⁶ See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=600&-ds_name=EC0751SSSZ5&-lang=en.

¹³⁷ 13 C.F.R. § 121.201, NAICS code 517110.

¹³⁸ See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=600&-ds_name=EC0751SSSZ5&-lang=en.

¹³⁹ See *Trends in Telephone Service*, at tbl. 5.3.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.*

fewer employees and two have more than 1,500 employees.¹⁴³ Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities that may be affected by rules adopted pursuant to the NPRM.

67. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁴⁴ Census Bureau data for 2007 shows that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Interexchange carriers can be considered small entities.¹⁴⁵ According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.¹⁴⁶ Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.¹⁴⁷ Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by rules adopted pursuant to the NPRM.

68. *Operator Service Providers (OSPs).* Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁴⁸ Census Bureau data for 2007 show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Interexchange carriers can be considered small entities.¹⁴⁹ According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 31 have 1,500 or fewer employees and 2 have more than 1,500 employees.¹⁵⁰ Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our proposed rules.

69. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁵¹ Census data for 2007 show that 1,523 firms provided resale

¹⁴³ *Id.*

¹⁴⁴ 13 C.F.R. § 121.201, NAICS code 517110.

¹⁴⁵ See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=600&-ds_name=EC0751SSSZ5&-lang=en.

¹⁴⁶ See *Trends in Telephone Service*, at tbl. 5.3.

¹⁴⁷ *Id.*

¹⁴⁸ 13 C.F.R. § 121.201, NAICS code 517110.

¹⁴⁹ See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-skip=600&-ds_name=EC0751SSSZ5&-lang=en.

¹⁵⁰ *Trends in Telephone Service*, at tbl. 5.3.

¹⁵¹ 13 C.F.R. § 121.201, NAICS code 517911.

services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.¹⁵² Thus under this category and the associated small business size standard, the majority of these local resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.¹⁵³ Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.¹⁵⁴ Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the Notice.

70. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁵⁵ Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1,000 employees and one operated with more than 1,000.¹⁵⁶ Thus under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data,¹⁵⁷ 881 carriers have reported that they are engaged in the provision of toll resale services. Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our proposed rules.

71. *Payphone Service Providers (PSPs).* Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁵⁸ Census Bureau data for 2007 shows that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these PSPs can be considered small entities.¹⁵⁹ According to Commission data,¹⁶⁰ 657 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 653 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

72. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has

¹⁵² http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

¹⁵³ See *Trends in Telephone Service*, at tbl. 5.3.

¹⁵⁴ *Id.*

¹⁵⁵ 13 C.F.R. § 121.201, NAICS code 517911.

¹⁵⁶ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

¹⁵⁷ *Trends in Telephone Service*, at tbl. 5.3.

¹⁵⁸ 13 C.F.R. § 121.201, NAICS code 517110.

¹⁵⁹ See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

¹⁶⁰ *Trends in Telephone Service*, at tbl. 5.3.

developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁶¹ Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.¹⁶² Thus under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.¹⁶³ Of these, all 193 have 1,500 or fewer employees and none have more than 1,500 employees.¹⁶⁴ Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by rules adopted pursuant to the Notice.

73. *800 and 800-Like Service Subscribers.*¹⁶⁵ Neither the Commission nor the SBA has developed a small business size standard specifically for 800 and 800-like service ("toll free") subscribers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁶⁶ Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.¹⁶⁷ Thus under this category and the associated small business size standard, the majority of resellers in this classification can be considered small entities. To focus specifically on the number of subscribers than on those firms which make subscription service available, the most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, 877, and 866 numbers in use.¹⁶⁸ According to our data for September 2009, the number of 800 numbers assigned was 7,860,000; the number of 888 numbers assigned was 5,888,687; the number of 877 numbers assigned was 4,721,866; and the number of 866 numbers assigned was 7,867,736. The Commission does not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small businesses under the SBA size standard. Consequently, the Commission estimates that there are 7,860,000 or fewer small entity 800 subscribers; 5,888,687 or fewer small entity 888 subscribers; 4,721,866 or fewer small entity 877 subscribers; and 7,867,736 or fewer small entity 866 subscribers.

¹⁶¹ 13 C.F.R. § 121.201, NAICS code 517911.

¹⁶² http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

¹⁶³ *See Trends in Telephone Service*, at tbl. 5.3.

¹⁶⁴ *Id.*

¹⁶⁵ We include all toll-free number subscribers in this category, including those for 888 numbers.

¹⁶⁶ 13 C.F.R. § 121.201, NAICS code 517911.

¹⁶⁷ http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

¹⁶⁸ *Trends in Telephone Service*, at tbls. 18.4, 18.5, 18.6, 18.7.

d. Wireless Carriers and Service Providers

74. Below, for those services where licenses are subject to auctions, the Commission notes that, as a general matter, the number of winning bidders that qualify as small businesses at the close of a given auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

75. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.¹⁶⁹ Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”¹⁷⁰ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.¹⁷¹ For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007 shows that there were 1,383 firms that operated that year.¹⁷² Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (“PCS”), and Specialized Mobile Radio (“SMR”) Telephony services.¹⁷³ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.¹⁷⁴ Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

76. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined “small business” for the wireless communications services (“WCS”) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million for each of the three preceding years.¹⁷⁵

¹⁶⁹ U.S. Census Bureau, 2007 NAICS Definitions, 517210 Wireless Telecommunications Categories (Except Satellite), <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

¹⁷⁰ U.S. Census Bureau, 2002 NAICS Definitions, 517211 Paging, <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

¹⁷¹ 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

¹⁷² U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=700&-ds_name=EC0751SSSZ5&-lang=en.

¹⁷³ See *Trends in Telephone Service*, at tbl. 5.3.

¹⁷⁴ *Id.*

¹⁷⁵ Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS), GN Docket No. 96-228, *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).